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ABSTRACT

This secondary unit of instruction on the adding machine is one of sixteen Common Core Units in Business Education (CCUBE). The units were designed for implementing the sixteen common core competencies identified in the California Business Education Program Guide for Office and Distributive Education. Each competency-based unit is designed to facilitate personalized instruction and may include five types of materials: (1) a teacher's guide, which provides specific strategies for the units as well as suggestions for the use of the materials; (2) a student manual, which directs the student through the unit's activities and jobs and brings the student to the competency level for the unit; (3) working papers, which are consumable materials used in completing the jobs and activities described in the student manual; (4) pre/post tests and quizzes; and (5) suggested electronic media. A strategies manual and the California Business Education Program Guide and supplements are also available--see note. (LRA)

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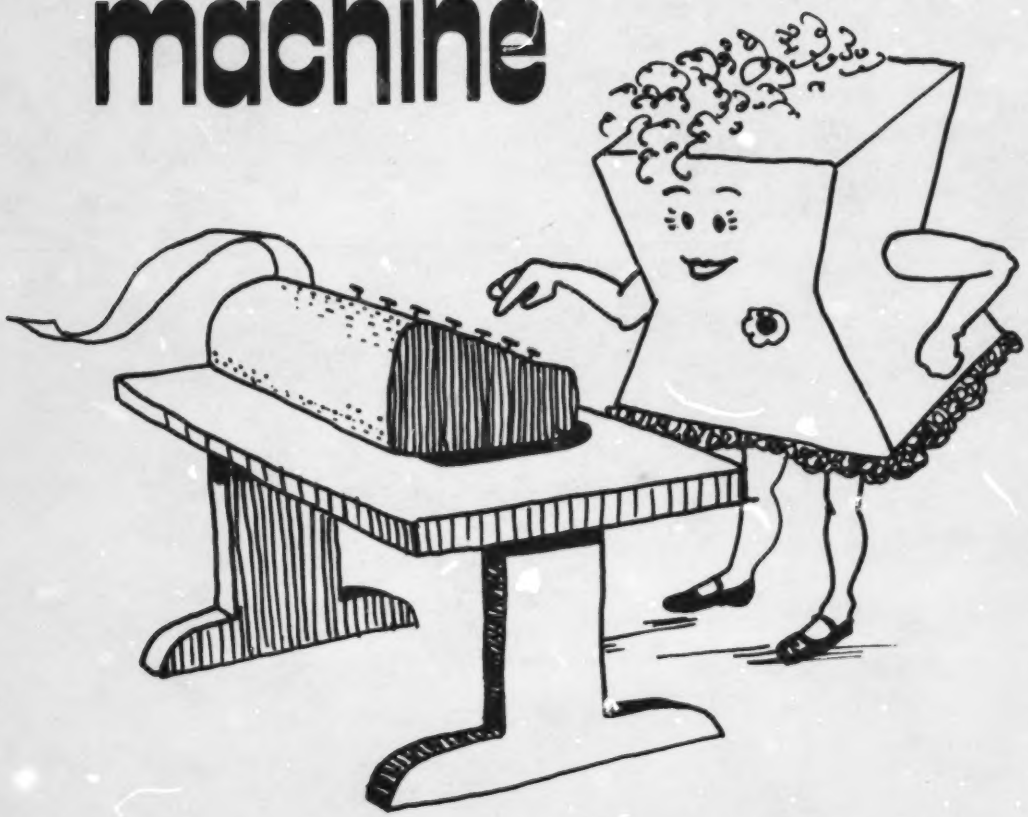
THE HOW AND WHY OF THE adding machine



CUBE

COMMON CORE UNITS IN BUSINESS EDUCATION

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CE 027 589

ADDING MACHINE

Written by

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***NOTE: READ CAREFULLY BEFORE YOU START!**

Dear Student:

Wouldn't it be wonderful to have a skill to help you earn money and to help the business world?

The business world needs employees and workers who know how to use the adding machine.

By the time you finish this Student Manual and Working Papers you will be able to add, subtract, multiply and determine decimal placement while using the correct finger position on the 10-key adding machine.

Read carefully each sheet in the Student Manual titled, REINFORCEMENT SHEET. They teach you what you need to know and the activities that follow give you practice on what was taught on the REINFORCEMENT SHEET. *After you have successfully completed each activity and have received your teacher's signature, as indicated on page 1 of your Working Papers, return back to your Student Manual and complete the next page.* Every time you see a

sign you should stop and get the progress quiz indicated.

DO!

Please do not write in the Student Manual. All answers should be placed on Working Papers. Make sure you staple tapes from each activity on the appropriate slot on pages 6 and 7 of your Working Papers.

It is important for you to concentrate because you will not only be tested on the material but it will help you operate the adding machine with greater speed.

Good luck! Work hard, and have fun while completing the Adding Machine requirements.

Sincerely yours,

Ima Teacher

Ima Teacher

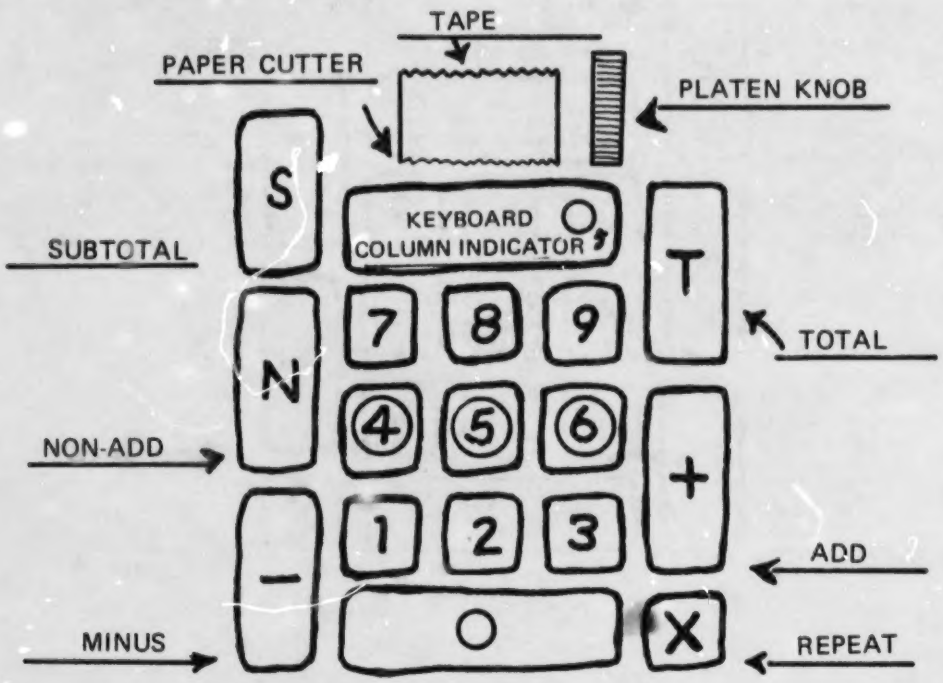
REINFORCEMENT SHEET

MACHINE PARTS

MACHINE PARTS REVIEW

There are many manufacturers of adding machines just as there are many manufacturers of automobiles.

Some of the parts of the 10-key adding machine that you will need to learn are shown in the diagram below.



Step 1. Study the diagram above and locate the parts on your machine. They may be in a different place because of the many brands and models.

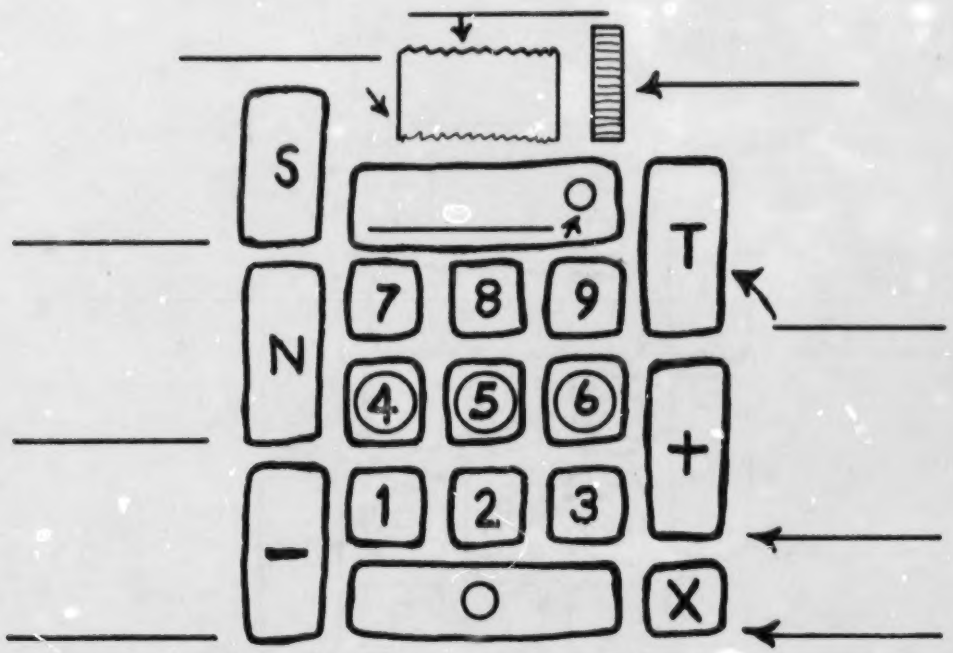
Step 2. Write the names of the machine parts on Page 2 of your Working Papers.

REINFORCEMENT SHEET

ACTIVITY 1

Machine Parts

Can you write the ten names of the machine parts below *without* looking at the answers? Do this on Page 2 of your Working Papers. Make sure you cover the answers you wrote on Step 2. *Do Not Write* in this book! (Activity 1)



Review Parts and then get
Quiz 1 from your Instructor.

REINFORCEMENT SHEET

TOUCH SYSTEM

DESK ARRANGEMENT AND HOME ROW KEYS

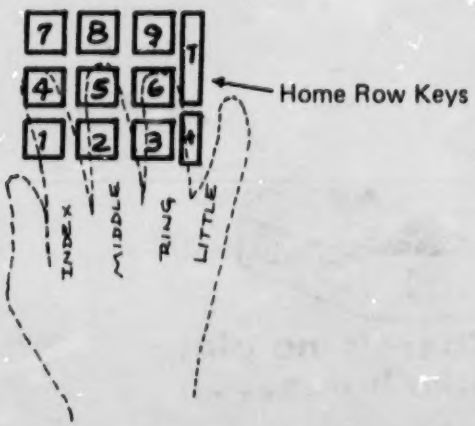
1. Is your book to the left, machine on the right, and pen or pencil in between? Do it this way even though you are left-handed!

2. Is the paper tape in your machine and is the electric cord plugged into the machine and into the wall outlet?

3. Is your left hand on the book to guide your eyes, your right hand on the home row keys, (see diagram below and directions on next page), your feet flat on the floor, and your body seated comfortably in the chair?

4. Do you know where the Plus Key and the Total Key are?

IF YOU DO, BEGIN!



REINFORCEMENT SHEET

Operation Of The Home Row And Total Key

HOW TO OPERATE HOME ROW KEYS AND TOTAL KEY

1. Curve the fingers on your right hand and put your index finger on 4, your middle finger on 5, and your ring finger on 6. They should have a special feel to them. Do they?

2. DO NOT rest your hand on the bottom of the adding machine while you operate the machine – POOR HABIT!

3. Strike the total key with the little finger once to show a T or *. If a figure prints on the tape strike the T or * again.

Problem for Practice

1. Strike the 4 key with your index finger and strike the plus key with your little finger.

2. Strike the 5 key with your middle finger and strike the plus key with your little finger.

3. Strike the 6 key with your ring finger and strike the plus key with your little finger, then strike the total key with your little finger.

4. Is your answer .15? YES (Great)
   NO (Repeat)

There's no place like home...

PRACTICE SHEET

ACTIVITY 2
Adding And Total Key

1. Use the roller knob to roll up your tape so you can write your name, activity number, and date at the top of the tape.

2. *Begin every problem with a clear T or a *.*

3. Do each problem below *twice*. Do them over until you have two correct answers in a row on the tape. Circle both correct problems together and then continue to the next problem.

4. If there is *NO decimal* in your problem – *DO NOT* put a decimal in your answer!!!

5. NO LOOKING AT YOUR MACHINE!

(1)

6	Strike 6, then plus
5	
4	
66	Strike 6 then 6, plus
54	
44	
179	

(2)

5
4
6
65
56
46
182

(3)

45
55
56
456
654
564
1830

(4)

465
645
546
4465
5664
6456
18241

(5)

564
445
546
645
556
654
3410

GO!

Read

TEAR OFF YOUR TAPE AND FOLD IT. STAPLE TAPE TO THE APPROPRIATE SPACE MARKED ON PAGE 6 OF YOUR WORKING PAPERS.

PLEASE DO THIS FOR EACH ACTIVITY.

DID YOU GET TWO CORRECT ANSWERS IN A ROW AND CIRCLE THEM? IF YOU DID, GO ON.

REINFORCEMENT SHEET

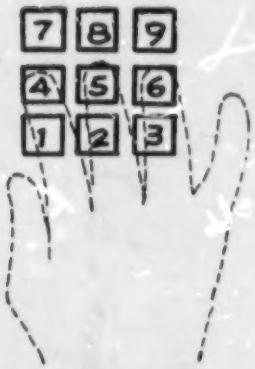
Up Reaches To The 7, 8, And 9 Keys

*Most machines print two decimal places. That is because most of the work in the business world is with dollars and cents.

✓ *When you are adding whole numbers, pretend the decimal mark *IS NOT* there.

1. is your desk arranged okay? (Check Page 5 again)

2. Do you know where the 7, 8, and 9 keys are? IF YOU DO, BEGIN!



Reach up ↑ from the 4 to 7

Reach up ↑ from the 5 to 8

Reach up ↑ from the 6 to 9

Each finger is used to press the key above without *LOOKING*

1. Curve the fingers of your right hand and put them on the home row.

2. Strike the total key with the little finger once to show a T or a *. If a figure prints on the tape, strike the T or a * again.

3. Strike the 7 key with your index finger and strike the plus key with your little finger.

4. Strike the 8 key with your middle finger and strike the plus key with your little finger.

5. Strike the 9 key with your ring finger and strike the plus key with your little finger and then strike the total key with your little finger.

6. Is your answer 24? YES (Great) NO (Repeat)

✓ REMEMBER TO COME HOME IMMEDIATELY AFTER STRIKING THE KEY ABOVE THE HOME KEY!

PRACTICE SHEET

ACTIVITY 3

Practice On 7, 8, And 9 Reaches

1. Write your name, activity number, and date at the top of the tape.
2. Begin every problem with a clear T or a *.
3. Do each problem below *twice*. Do them over until you have two correct answers in a row on the tape. Circle both correct problems together then continue to the next problem. ✓
4. NO LOOKING AT YOUR MACHINE!

.....

(1)	(2)	(3)	(4)
9	5	47	474
8	3	58	585
7	5	69	696
4	6	74	747
7	9	85	858
4	6	96	969
39	39	429	4329

(5)
695
586
475
8584
7658
5574
23572

TEAR OFF YOUR TAPE AND FOLD IN LENGTHS AS LONG AS THIS PAPER AND STAPLE IT TO PAGE 6 OF YOUR WORKING PAPERS.

Don't get "hung"-up—practice!

SKILL DEVELOPMENT SHEET

Down Reaches To 1, 2, And 3 Keys

Most of the time you will be verifying – checking the answers another employee or worker got when he did the job. This is very valuable work in the business world.

1. Is your desk arranged okay?

2. Do you know where the 1, 2, and 3 keys are? IF YOU DO, BEGIN!

Reach down ↓ from 4 to 1

Reach down ↓ from 5 to 2

Reach down ↓ from 6 to 3

Each finger is used to press the key below without LOOKING!

1. Curve the fingers of your right hand and put them on the home row.

2. Strike the total key with the little finger once to show a T or a *. If a figure prints on the tape, strike the T or * again.

3. Strike the 1 key with your index finger and strike the plus key with your little finger.

4. Strike the 2 with your middle finger and strike the plus key with your little finger.

5. Strike the 3 key with your ring finger and strike the plus key with your little finger and then strike the total key with your little finger.

6. Is your answer 06? YES (Great) NO (Repeat)

✓ REMEMBER TO COME HOME IMMEDIATELY AFTER STRIKING THE KEY BELOW THE HOME KEY!

ACTIVITY 4 — Practice On 1, 2, And 3 Keys

1. Write your name, activity number, and date at the top of the tape.
2. Begin every problem with a clear T of a *.
3. Do each problem below *twice*. Do them over until you have two correct answers in a row on the tape. Circle both correct problems together then continue to the next problem. ✓
4. NO LOOKING AT YOUR MACHINE!

.....

(1)	(2)	(3)	(4)
1	5	41	141
2	2	52	525
3	5	63	636
4	6	14	414
1	3	25	252
4	6	36	363
15	27	231	2331

(5)
524
541
635
4178
5287
6393
17558

REMEMBER TO TEAR OFF YOUR TAPE, FOLD IN PROPER LENGTHS AND STAPLE TO PAGE 6 OF YOUR WORKING PAPERS.

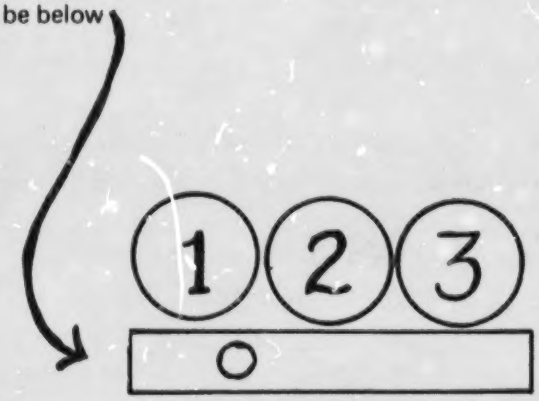
KEEP THE TAPES UNTIL YOU FINISH THIS LAP.

DID YOU GET TWO CORRECT ANSWERS IN A ROW AND CIRCLE THEM?
IF YOU DID – GO ON!

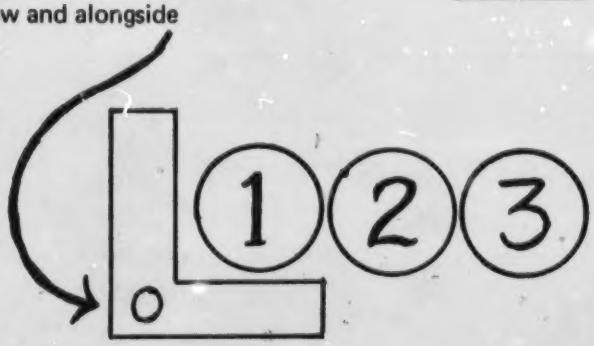
Zero Key

Luckily all 10-key adding machines have the same standard keyboard except for the zero key. On some machines the zero key will be below

STRIKE YOUR ZERO KEY WITH YOUR THUMB – TRY IT!



or below and alongside



I Understand

PRACTICE SHEET

ACTIVITY 5
Practice On Zero Key

1. Write your name, activity number, and date at the top of the tape.
2. Begin every problem with a clear T or a *
3. Do each problem below *twice.* Do them over until you have two correct answers in a row on the tape. Circle both correct problems together then continue to the next problem. ✓
4. NO LOOKING AT YOUR MACHINE!

.....

(1)	(2)	(3)
410	102	301
520	405	604
630	708	907
407	203	470
580	506	528
690	890	639
3300	2814	3449

(4)	(5)
145	120
206	364
365	578
785	1934
896	2783
490	3056
2887	8835

REMEMBER TO TEAR OFF YOUR TAPE AND FOLD IN LENGTHS AS LONG AS THIS PAPER FOR EACH ACTIVITY. STAPLE IT TO PAGE 6 OF YOUR WORKING PAPERS

✓READ!

DID YOU REMEMBER TO LEAVE YOUR DECIMAL OUT OF YOUR ANSWER IF THERE IS NO DECIMAL IN YOUR PROBLEM?

Get these down pat!

3 Methods Of Correcting Errors

(1) CORRECTIONS WITH THE CORRECTION KEY OR THE CLEAR LEVER

After you have put a figure into the machine, (*before you strike the plus bar*) you may know immediately that you have hit the wrong key – Simply strike the correction or clear key with your nearest finger . . .

. . . Or if your machine has a lever, you pull it to the right . . .

. . . And now the wrong number is removed and you can put in the right number.

Practice doing the three problems below. *Pretend you catch the error before you hit the plus key.* So you just have to use the correction or clear key.

(a) 5
10
error – 40 (Use clear key)
right number – 10
25

(b) 40
3 error
7
47

(c) 37
49 error
17
54

Corrections, continued:

(2) CORRECTIONS WITH THE MINUS KEY

Can you locate the minus key on your machine? Good! If the minus key is on the right side, strike it with your little finger. If the minus key is on the left side, ask your teacher which finger to use.

758 ←———	Enter these three figures and strike the plus key
–412 ←———	Enter these three figures and strike the *minus* key
346 T	Strike the T key to get your answer

After you have hit the plus key, *you may realize* that you have hit a wrong key. Simply put that same figure into the machine and subtract it with the minus key.

Practice doing the problems below making the same errors and correcting them on your tape.

82
19
54 error
– 54 error subtracted
45 correct number
146 T

703
456 error
– 456 error subtracted
645 correct number
821
2169 T

68
92
44
53 error
– 53 error subtracted
27
231 T

No Sweat!

(3) PEN OR PENCIL CORRECTIONS

After you have taken a total, you may find out by checking that you have hit the wrong key. Simply take your pen or pencil and cross out the wrong amount and put the correct amount beside it. next add or subtract the difference from the total.

Practice doing the problems below making the same errors and correcting them on your tape. Don't forget to use a pen or pencil.

195	250	~~168~~ 177	~~4472~~ 4372
3579	624 1	245	5093
850	583	734	8615
1402 T	1457 T	1147 T	18180 T
2+	3–	9+	100–
1404	1454	1156	18080

ACTIVITY 6
Business World Problems - Addition

DIRECTIONS: You use a deposit ticket to list money which you want to put into your bank account. In order to get the total of your deposit you must add the currency, coins, and checks together. On the following deposit slips add your total deposit.

Do not write on this LAP! Write answers on your Working Papers for Activity 6.

No. 1

DEPOSITED IN THE ACCOUNT OF
Ima Student
4 Awhile Blvd.
Off-to-work, CA 92666
DATE December 4 19 78

ITEMS RECEIVED FOR COLLECTION OR DEPOSIT ARE CREDITED CONDITIONALLY SUBJECT TO ACTUAL PAYMENT

	DOLLARS	CENTS
CURRENCY	56	00
COIN	2	98
CHECKS LIST SEPARATELY. USE A. B. A. NUMBERS.		
90-1222	43	72
16-1222	286	52
98-1222	189	39
90-2222	12	81
90-1222	89	98
16-1222	78	19
TOTAL $		

PLEASE DO NOT WRITE IN THIS SPACE

DEPOSIT TICKET, 12

No. 2

DEPOSITED IN THE ACCOUNT OF
Laura Student
5 Days-a-week Ave.
Up your salary, TN
93143
DATE 19

ITEMS RECEIVED FOR COLLECTION OR DEPOSIT ARE CREDITED CONDITIONALLY SUBJECT TO ACTUAL PAYMENT.

	DOLLARS	CENTS
CURRENCY	29	00
COIN	4	53
CHECKS LIST SEPARATELY. USE A. B. A. NUMBERS.		
16-2222	316	12
90-1222	77	77
90-1222	83	61
16-2212	54	45
16-2211	98	58
76-3232	89	85
90-1222	67	93
51-2222	38	81
TOTAL $		

PLEASE DO NOT WRITE IN THIS SPACE

DEPOSIT TICKET 12

Check your answer — Did you do it right? If not, try again.

1.) $759.29
2.) $860.65

ACTIVITY 6, Continued:

DIRECTIONS: Many businesses use sales slips to record sales. In order to find the total of a particular sale you must add each item in the amount column. In the two sales slips below, check the existing totals to see if they are correct. This is called *verifying totals.* On page 2 of your Working Papers circle CORRECT or WRONG IN THE SPACE PROVIDED.

No. 3

AM Enterprises, Inc.
901 Fifth Street, Clovis, California 93612

DATE	CLERK NO.	HOW SOLD	AMT. REC'D.	AMT. OF SALE
3-10	5	Cash	25.00	21.61

Name Mr Tom Jones No. 319
Address 489 E. Park
Villa Park, CA 93410

Quantity	Article	Unit Price	Extension
3	Brooms	1.19	3 57
1	Mop	2.59	2 59
2	Buckets	1.25	2 50
1	Ladder	12.95	12 95
		TOTAL →	21 61

Cash X | Charge | C.O.D. | Sold X | Taken | Will Call

Name No.
Address

SALES CHECK 16 MWW

No. 4

AM Enterprises, Inc.
901 Fifth Street, Clovis, California 93612

DATE	CLERK NO.	HOW SOLD	AMT. REC'D.	AMT. OF SALE
3-12	5	Charge		93.70

Name James Brown No. 320
Address 731 Boxer St.
Heavyweight, CA 94315

Quantity	Article	Unit Price	Extension
2	Mops	2.59	5 18
2	Ladders	22.95	45 90
3	Shovels	5.69	17 07
1	Hose	6.95	6 95
2	Sprayers	3.00	6 00
2	Buckets	1.25	2 50
		TOTAL →	93 70

Cash | Charge X | C.O.D. | Taken | Sold | Will Call

Name No.
Address

SALES CHECK 16 MWW

STAPLE TAPE TO PAGE 6 OF YOUR WORKING PAPERS.

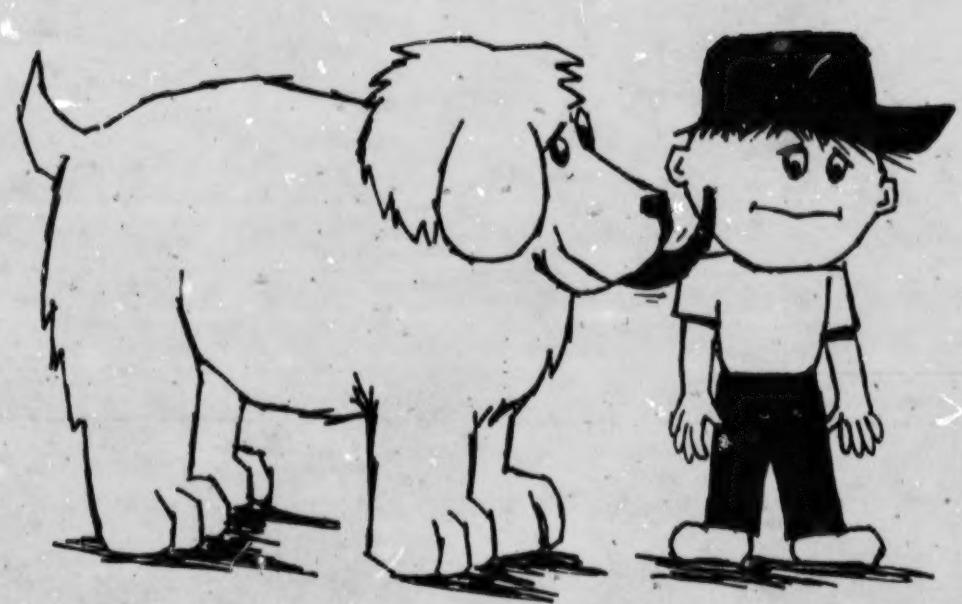
REVIEW FINGER PLACEMENT AND ADDING, THEN GET QUIZ 2 FROM YOUR INSTRUCTOR.

REINFORCEMENT SHEET

Minus Key

It is very important that you are able to subtract accurately. Follow these directions and it will be easy.

134 ←——— Enter these three figures and strike the plus key.
−114 ←——— Enter these three figures and strike the minus key.
20 Strike the T key to get an answer.



Don't quit . . . You've got it licked!

ACTIVITY 7

Practice On Subtraction

1. Remember to check your desk arrangement and write on your tape.

2. What do you begin every problem with? That's right – a T or *.

3. And what else? That's right – NO *LOOKING* AT YOUR MACHINE!

4. If you do not get the answers indicated below each problem, repeat them until you do.

(1)
49
13–
654
328–
362 Yes? (Great)
No? (Repeat)

(2)
1,058
792–
2,387
132–
19
3,254–
583
131 tc
Yes? (Great)
No? (Repeat)

(On a Credit Balance some machines print tc, cb or the total is printed in red)

(3)
44.76
6.54
10.75
.50
62.87
25.75
1.22–
20.60
1.25–
2.64–
166.66
Yes? (Great)
No? (Repeat)

(4)
40.76
.65–
1.48
4.44
50.25–
6.45
90.88
107.89
1.32–
7.77
8.93–
82.51–
23.45
76.82
216.28
Yes? (Great)
No? (Repeat)

(5)
11.56–
14.30–
50.23
92.78
103.47
1.02–
8.93–
103.60
5.68–
10.22
.19–
34.68
52.75–
1.76–
298.79

REMEMBER TO TEAR OFF YOUR TAPE AND FOLD IN PROPER LENGTHS. STAPLE TAPE TO PAGE 6 OF YOUR WORKING PAPERS.

READ!→ DID YOU NOTICE PROBLEM 2? THERE WAS A CREDIT BALANCE! IF YOU HAVE A QUESTION – ASK YOUR INSTRUCTOR.

ACTIVITY 8
Business World Problem - Subtraction

Your job is to find if the sales in the different departments in a store had an increase or had a decrease from one month to the next.

Remember to put the largest figures first into your machine if it does not have an automatic credit balance. How will you know? Your machine will print a lot of nines like this: 999,997.76. You will always have to remember to put the largest figures first into your machine if it is one that prints nines. If you had more money *THIS MONTH* than *LAST MONTH,* then there was an increase. DO *NOT* WRITE ON THIS PAGE . . . GO TO ACTIVITY 8 IN YOUR WORKING PAPERS AND FINISH THE FORM GIVEN.

			DIFFERENCE	
	Last Month	This Month	Increase	Decrease
Boys' Clothes	158.60	210.40		
Cosmetics	610.50	520.00		
Hardware	462.70	370.82		
Junior Clothes	206.70	179.80		
Pet	523.00	435.00		
Shoes	894.63	1,062.17		
Snack Bar	93.67	104.62		
Sporting Goods	1,293.44	2,078.56		
Toys	783.40	809.40		
			1,041.41	297.28

WHEN YOU ADD THE NUMBERS IN THE INCREASE COLUMN AND IN THE DECREASE COLUMN AND GET THE SAME ANSWER AS THE ONE GIVEN, YOU MAY ASSUME THAT YOUR WORK IS CORRECT.

REVIEW FINGER PLACEMENT AND SUBTRACTION, THEN GET QUIZ 3 FROM YOUR INSTRUCTOR.

RE'NFORCEMENT SHEET

Subtotal Key And Non-Add Key

Can you find the subtotal key on your machine? Good!

You use the subtotal key to find the *total* at *any time* in a problem.

The subtotal answer will have an *S* by it, and the amount *stays* in your machine until you total. ✓

These two figures equal

- 20 → Enter these two figures and strike the plus key.
- 30 → Enter these two figures and strike the plus key and the subtotal key.

Subtotal.

- 50S → This subtotal answer stays in your machine.

The subtotal plus these two figures equals this subtotal

- 10 → Enter these two figures and strike the plus key.
- 40 → Enter these two figures and strike the plus key and the subtotal key.

- 100S → This subtotal answer stays in your machine.

The above subtotal plus these two figures equals this total

- 2 → Enter this figure and strike the plus key.
- 3 → Enter this figure and strike the plus key and the total key.
- 105T → This total clears the subtotal out of the machine.

MORE PROBLEMS TO HELP YOU LEARN:

(1)
24
37
48
109 S

52
63
224 S

76
89
389 T

(2)
245
67
32
344 S

407
893
1644 S

102
376
2122 T

(3)
1462
189
14
15.94
3259 S

207
893
4359 T

(4)
1.42
6.78
8.20 S

9.83
5.55
23.58 S

1.02
7.83
32.43 T

ACTIVITY 9

Practice On Subtotal And Non-Add Keys

Can you find the Non-Add Key on your machine? Good!

You use the Non-Add to show a figure that you do not want to be added into the total.

The Non-Add figure would have a * by a "N" by it.

A use of the Non-Add Key would be the numbering of your problems. NA by the problems means to strike the N key.

1 * NA ↓	Enter the 1 figure and strike the Non-Add Key with the closest finger . . . This signifies Problem Number 1.
25	Enter these figures and strike the plus key
30	Enter these figures and strike the plus key
55 T	
	The 1 figure printed but *did not* add in the total. Right?

. . . . . .

MORE PROBLEMS TO HELP YOU LEARN:

1 * NA ↓	2 * NA ↓	3 * NA ↓	4* NA ↓
44	673	4789	1.36
52	483	356	.18
87	683	41	.59
93	299	3476	2.13 T
276 T	2138 T	8662T	

Can you use both the subtotal and the non-add keys in the same problem? Let's see if you can!

The following kind of subtotal is used in the business world when you have a problem that is continued on the next page.

(Page 1)	(Page 2)	(Page 3)
2 * NA	150 Subtotal again	425 Subtotal again
	200	450
50	75	25
100	425 Subtotal	900 Total
150 Subtotal		

(STAPLE YOUR TAPE TO PAGE 7 OF YOUR WORKING PAPERS)

ACTIVITY 10

Business World Problems - Subtotals Repeat Key

Your job is to find the balance after each check has been written or a deposit has been made and record it in the balance column of the check register. DO NOT WRITE ON THIS PAGE . . . GO TO ACTIVITY 10 OF YOUR WORKING PAPERS. ✓

The first two lines have been done for you, but please verify them.

✓(PUT THE BALANCE IN YOUR MACHINE FIRST!)

CHECK NO.	DATE	CHECK ISSUED TO	DEPOSITS (Add)		AMOUNT OF CHECK (Subtract)		BALANCE $162.14	
123	10/16	Pacific, Gas, and Elec.			12	03	150	11
124	10/17	Treeland Rental Agency			100	00	50	11
	10/18		350	00				
125	10/19	Beast Bay MUD			26	78		
126	10/22	Catwells			40	00		
127	10/23	Sears Sawbuck Co.			25	67		
128	10/24	TankAmericard	250	00				
129	10/25	Good Care Auto			57	88		
130	10/27	Monkey Wards			37	82		
131	10/30	Noosepaper			2	25	459	71
							TOTAL	

WHEN YOU HAVE FINISHED ADDING THE DEPOSITS, SUBTRACTING THE CHECKS, AND SUBTOTALING EACH TRANSACTION, AND GET THE SAME ANSWER AS THE ONE ABOVE THE WORD TOTAL, YOU MAY ASSUME YOUR WORK IS CORRECT. STAPLE YOUR TAPE TO PAGE 7 OF YOUR WORKING PAPERS.

GR-R-R-EAT

REVIEW SUBTOTAL KEY AND NON-ADD KEY, THEN GET QUIZ 4 FROM YOUR INSTRUCTOR.

REINFORCEMENT SHEET

Repeat Key

Can you find the repeat key on your machine? Good!

The repeat key is used to multiply in a way that is called repeat addition. It is also similar to the way you have been doing multiplying.

So, let's review and learn the 10-key adding way of multiplying.

By Hand

Multiplicand → 42
Multiplier → x37
294
126
1554

By Machine

42
42
42
42
42
42
42 } = 7 x 42
420
420
420 } = 30 x 42
1554 T

Do the following steps:

1. Clear machine and enter the multiplicand, 42, and lock the repeat key and then strike the add key 7 times with your nearest finger. (The 7 is the first number to the right in the multiplier). You have now multiplied 42 times 7.

2. Strike the zero key and strike the add key 3 times. (The 3 is the second number from the right in the multiplier.) You have now multiplied by 30.

   NOTE: You multiply first by 7 and then by 30 (30 + 7 = 37)

3. Release the repeat key and clear your machine. (On some machines this step is not necessary) (Question? See instructor).

4. Press total key.

5. Did you get 1554? If not, try again!

REINFORCEMENT SHEET

MORE PROBLEMS TO HELP YOU LEARN:

(1) 23 Your tape would have 23 five times and 230 two times.
x25 (Does it? YES is excellent!) (5 x 23 plus 20 x 23)
575

(2) 38 Your tape would have 38 two times and 380 four times.
x42 Does it? (2 x 38 plus 40 x 38)
1596

(3) 348 Your tape would have 348 five times and 3480 three times.
x35 Does it?
12180

(4) 1,761 Your tape would have 1,761 six times, and 17610 four times, and 176,100 one time.
x146 Does it?
257106

MORE PROBLEMS TO HELP YOU LEARN MULTIPLYING WITH ZEROS:

By Hand

483
x205
2415
9660
99015

By Machine

add zero because of the zero in 205 then another zero to move over for the 2 in 205.

483
483
483
483
483 → TOP NUMBER 5 TIMES – 5 x 483
48300
48300 → TOP NUMBER WITH 2 ZEROS 2 TIMES = 200 x 483
99015

(1) 241 Your tape would have 2410 five times. Does it? YES is excellent.
x50
12050

(2) 1763 Your tape would have 176300 four times. Does it?
x400
705200

(3) 2619 Your tape would have 2619 six times and 261900 four times.
x406 Does it?
1063314

Did you get the same answers? Yes is excellent! If not, you need to repeat this part before you continue.

ACTIVITY 11
Practice On Multiplication

1. Remember to check your desk arrangement and write on your tape.

2. Be sure to have that clear signal (T or *) before you start every problem and be sure to use the Non-Add Key to number your problems.

✓ 3. Because all of these problems are multiplying problems – *remember to clear the machine before you use the total key*.

4. And, of course NO LOOKING AT YOUR MACHINE!

(Always Repeat if NO)

1)	47 X 3 is 141	YES? NO?
2)	484 X 6 is 2904	YES? NO?
3)	823 X 34 is 27982	YES? NO?
4)	674 X 258 is 173892	YES? NO?
5)	1,945 X 346 is 672970	YES? NO?
6)	245 X 50 is 12250	YES? NO?
7)	827 X 604 is 499508	YES? NO?
8)	7,163 X 406 is 2908178	YES? NO?
9)	6,805 X 73 is 496765	YES? NO?
10)	876 X 412 is 360912	YES? NO?

REMEMBER TO TEAR OFF YOUR TAPE AND FOLD IN LENGTHS AS LONG AS THIS PAPER FOR EACH ACTIVITY. STAPLE TAPE TO PAGE 7 OF YOUR WORKING PAPERS.

ACTIVITY 12
Business World Problems - Multiplication

Your job is to find out how much inventory is worth that your store has for sale. You will have to multiply the price of one piece of merchandise times the quantity to get the value or how much the inventory is worth.

1. Carefully study the problem below.
2. Understand? If so, turn to page 4 of your Working Papers, Activity 12.
3. Make a tape of each problem. Pretend that no one is verifying your work and do each problem *twice* for accuracy.

STOCK NO.	DESCRIPTION	PRICE	QUANTITY	VALUE
20-103	Tire size 20 X 1.75	2.50	44	110.00
20-166	Tire size 24 X 1.75	2.67	86	229.62
20-1078	Tire size 26 X 1.75	3.45	32	110.40
20-1079	Tire size 26 X 2.12	3.76	9	33.84
198	Black pedals	1.56	104	162.24
2-176	Rat trap pedals	1.76	84	147.84
44-78	Basket	5.89	13	76.57
56-8	Speedometer	12.56	3	37.68
782	Banana Seat	5.75	6	34.50
				942.69

TOTAL

WHEN YOU TOTAL ALL THE NUMBERS IN THE VALUE COLUMN AND GET THE SAME ANSWER AS THE ONE OPPOSITE THE WORD TOTAL, YOU MAY ASSUME YOUR WORK IS CORRECT.

REVIEW YOUR MULTIPLICATION THEN GET QUIZ 5 FROM YOUR INSTRUCTOR . . . REMEMBER TO STAPLE TAPES TO WORKING PAPERS . . . PAGE 7.

USE OF DECIMALS

DON'T SHY AWAY BECAUSE OF THE WORD DECIMAL!

IT'S EASY . . . GO SLOW AND THINK!

1. Decimal points must line up in addition and subtraction – just like you learned in elementary school. Line up your decimal points. Bring the decimal points *straight down* in your answer.

```
 9.742
+7.500
-------
17.242
```

Adding by Hand

```
 9.742
-7.500
-------
 2.242
```

Subtracting by Hand

2. Notice the answer above has 3 decimals – Your machine only prints 2 decimals – So **DISREGARD** the decimal point your machine prints!

3. In order for you to arrange the numbers so that all of the decimal points line up, you have to *add zeros* to the right of the number with the *smallest* decimal placement. You do this so that it will have as many places as the digit with the largest number of decimal places.

By Hand

$$\begin{array}{r} 9.742 \\ +7.500 \\ \hline 17.242 \end{array}$$

By Machine

97.42
75.00
172.42

Disregard decimal that prints

Adding Machine Tape

Add 2 zeros at end to make decimals line up

DO THE SAME THING WHEN SUBTRACTING

By Hand

$$\begin{array}{r} 9.742 \\ -7.500 \\ \hline 2.242 \end{array}$$

By Machine

97.42
75.00
22.42

Disregard decimal that prints

Adding Machine Tape

Add 2 zeros at end to make decimals line up

SOME MORE EXAMPLES:

$$\begin{array}{r} 54.70 \\ +\ 1.23 \end{array}$$ Should look like $$\begin{array}{r} 54.70 \\ +\ 1.23 \end{array}$$ ← (Add zero so that decimals line up)

$$\begin{array}{r} 69.6 \\ -\ .832 \end{array}$$ Should look like $$\begin{array}{r} 696.00 \\ -\ .832 \end{array}$$ (Disregard decimals)

(Decimals lined up)

ACTIVITY 13
Practice On Adding & Subtracting With Decimals

1. Remember to check your desk arrangement and write on your tape.
2. Be sure to have that clear signal before every problem and be sure to use the Non-Add Key to number your problems.
3. Do each problem below!
4. NO LOOKING AT YOUR MACHINE!

(1) 4.54
+1.2
5.74 Yes? (Great)
No? (Repeat)

(2) 76.01
+93.3
169.31 Yes? (Great)
No? (Repeat)

(3) 7.182
+ 3.04
10.222 Yes? (Great)
No? (Repeat)

(4) 74.3
- 19.85
54.45 Yes? (Great)
No? (Repeat)

(5) 13.97
-4.052
9.918 Yes? (Great)
No? (Repeat)

(6) 4.207
- 1.03
3.177 Yes? (Great)
No? (Repeat)

REMEMBER TO TEAR OFF YOUR TAPE AND FOLD IN LENGTHS AS LONG AS THIS PAPER FOR EACH ACTIVITY. STAPLE TAPE TO PAGE 7 OF WORKING PAPERS.

Practice On Multiplying With Decimals

THE PROCEDURE OF MULTIPLICATION IS JUST LIKE YOU LEARNED IN ELEMENTARY SCHOOL

EXAMPLE:

3.93
x .541
393
1572
1965
2.126.13

= A total of 5 decimal places

Disregard decimal on machine

Count back 5 spaces for total number of decimal places in your problem.

MORE PRACTICE:

4.73
x .24 looks like

473
473
473
473
4730
4730
1.1352 T

(To determine decimal point, count back 4 digits from the number 2 in the total)

(4 decimal places – 4 digits beyond the decimal point)

9.01
x 2.6 looks like

901
901
901
901
901
901
9010
9010
23.426 T

(To determine decimal point, count back 3 digits from the number 6 in the total.)

(3 decimal places – 3 digits beyond the decimal point)

ACTIVITY 14

Multiplication With Decimals

1. Remember to check your desk arrangements and write on your tape.
2. Be sure to have that clear signal before every problem and be sure to use the Non-Add Key to number your problem.
3. Do each problem until you get the correct answer!
4. NO LOOKING AT YOUR MACHINE!

(1) 306.15 x 4.75 Yes? (Great)
1454.2125 No? (Repeat)

(2) 77.777 x .555 Yes? (Great)
43.166235 No? (Repeat)

(3) .43 x 9 Yes? (Great)
3.87 No? (Repeat)

(4) 145.6 x .870 Yes? (Great)
126.6720 No? (Repeat

(5) 765.3 x 5.2 Yes? (Great)
3979.56 No? (Repeat)

(6) 76.01 x 93.3 Yes? (Great)
7091.733 No? (Repeat)

(7) 39.42 x .3670 Yes? (Great)
14.467140 No? (Repeat)

(8) 275 x .093 Yes? (Great)
25.575 No? (Repeat)

(9) 567.89 x .345 Yes? (Great)
195.92205 No? (Repeat)

(10) 44.99 x .332 Yes? (Great)
14.93668 No? (Repeat)

REMEMBER TO TEAR OFF YOUR TAPE AND FOLD IN LENGTHS AS LONG AS THIS PAPER FOR EACH ACTIVITY. STAPLE TAPE TO WORKING PAPER PAGE 7.

ACTIVITY 15
Business World Problems - Decimals

A PURCHASE ORDER is used by companies to order merchandise.

1) Notice the headings on the purchase order. When figuring the total price you multiply quantity times unit price which equals total price for each item.

2) To find the total of all the items you purchased, add the items together.

Study Example Below:

AM Enterprises, Inc.
981 Fifth Street, Clovis, California 93612

VOID

PURCHASE ORDER NO. P0593-6 | DATE 3-12-78

TO Frank Smith
135 E Lamont
Westside, KY

DELIVER TO Same

DELIVERY DATE 3-20-78

SHIP BY UPS

QUANTITY	STOCK NO.	DESCRIPTION	UNIT PRICE	TOTAL PRICE
4 Reams	ST-392-6	White stock paper	5.95	23.80
5 doz.	ST-732-4	#2 lead pencils	1.25 doz.	6.25
				30.05
			6% Tax -	1.80
				31.85

Sandy Hill
PURCHASING AGENT

PURCHASE ORDER 18 MWW

UNDERSTAND? GREAT!

Go to Working Papers, Activity 15, and complete the Business World of Work Problems.

ADDING MACHINE
Teacher's Guide

I have divided this guide into special areas that will be of concern to you in the use of the Adding Machine Competency.

I. INTRODUCTION

The purpose of the Filmstrip, Student Manual, and Working Papers is to acquaint the student with the importance, function, and touch system of the adding machine. By the end of this competency, the student should have a working knowledge of the adding machine and be able to use the touch system effectively.

II. PERFORMANCE OBJECTIVES

Given a 10-key adding machine and 10 problems involving addition, subtraction, and multiplication the student will compute the answer using the touch method of operation with 90% accuracy.

Given a 10-key adding machine and 10 problems requiring a subtotal and grand total the student will compute a subtotal and grand total using the touch method of operation with 90% accuracy.

Given a 10-key adding machine and 10 problems involving decimal placement the student will determine the decimal placement with 90% accuracy.

III. COMPONENTS OF THE UNIT

**** A. Filmstrip/SlideTape**

"Why and How" filmstrip should be shown before the student starts his progress through the Student Manual.

B. Filmstrip/Slide Tape Quiz

There is a quiz to be given to the student after the filmstrip is over.

C. Student Manual

The Student Manual teaches the student. Following the introduction of each new concept, there are activities provided for reinforcement. The Student Manual is designed to teach independently from the filmstrip. So, if you do not have the filmstrip or equipment . . . Don't worry.

D. Opening Letter

Make sure every student reads the letter at the beginning of the Student Manual . . . Spot check comprehension before you sign it off on the Progress Chart – Page 1 of the Working Papers.

COMPONENTS OF THE UNIT, continued:

E. Activities

There are two types of activities:

1. Problem Practice – should be completed as directed. A student should do each problem twice before he advances to the next problem in the activity. (Example – Activity 2). When you "spot check" make sure student circles both consecutive answers for each problem on the tape.

2. Business World Practice – These activities have been placed in the Student Manual to show the student that there is a "real" use for the adding machine in each of the major areas . . . adding, subtracting, subtotaling, multiplying, and using decimals. (Example: Activity 6).

F. Activity 1

Even though a student has passed the quiz on the filmstrip, "Why and How of the Adding Machine", it is recommended that for reinforcement purposes he do Activity 1. It is up to the teacher whether you have them complete the section again.

G. Activities Tape

After each activity students are requested to fold tape in one foot lengths and staple them to the appropriate slot as indicated on pages 6 and 7 in the Working Papers. It is suggested that these two pages be printed on heavier stock for sturdiness.

H. Quiz

Whenever there is a Stop Sign at the bottom of the page, the student should do all of the activity indicated, then take the quiz.

I. Progress Chart

Three important facts about the progress chart are:

1. It is suggested that the progress chart be used. A temporary oral review given by the teacher at each check point before administering the quiz has been effective for me. Make sure you check for authorized signatures before you administer the Post Test.

2. When you spot check, make sure they did each step of the activity on their Working Papers.

3. If you want more or fewer check points merely make the adjustments before printing.

IV. TEACHER GUIDANCE AND RESPONSIBILITY

A. Make sure *Desk Arrangements* are proper as indicated on page 5 of Student Manual.

B. Make sure students *do not write* on Student Manual, but write on the Working Papers provided.

C. Stress to each student that he should first *read slowly all instructions* – if he does not understand then you will be more than willing to help him out.

D. Make sure students understand that they should *return back to the Student Manual after each activity.*

E. Part Differences:

1. Give each student a machine operations manual if the machine they are working on is different than the examples in the booklet.
2. Go over the parts with them if they are different from the parts listed on page 3 of the Student Manual.
3. You could redraw the diagrams to fit the machine you are using before you print.
4. Put diagrams of different machine parts near machines with corresponding labels on the parts so students can recognize the parts as they related to the filmstrip.

F. *Left-Handed* students should use their right hand. Stress they are more fortunate than the right handed person in that they can add with their right hand and write with their left hand.

V. LEVEL OF DIFFICULTY

The unit was written using realistic situations that will be encountered in the business world. The reading level averages approximately eighth grade level. Therefore, the unit can be used in junior high schools, high schools, and with adult students. This unit takes approximately 13 days to complete.

VI. TESTING INSTRUCTIONS

A. **Number of Copies:** You only need 10 copies of each test. Make sure you have them numbered so that you can check them out and in.

B. **Answer Sheet Packet for Tests and Quizzes:**

1. Students are *not* to write on the test copies. They are to write only on the answer sheet provided.

TESTING INSTRUCTIONS, continued:

2. All of the answer sheets for all of the tests and quizzes are together in one packet.
3. Students should turn in the answer sheet packet to you for *you* to keep until it is needed for the next quiz.
4. Make sure students write their name and quiz number on each tape and attach it to the last page of the answer sheet in the appropriate spot.

C. **Grading: Pass/Fail**

1. **Quiz:** each quiz has 10 problems (including teacher evaluation on quizzes 2, 3, and 4). 90% accuracy is required. A student can only miss one in order to proceed to next activity. If they do not pass quiz – have them go back and review student manual and take it again.
2. **Pre-Test/Post-Test/Alternate Post-Test:** There are 32 problems on the Pre-/Post Tests – a student can only miss four problems to pass. Spot check and make sure they understand all phases before they take the Post-Test.

VII. TESTS

Quizzes

1. There is a quiz at the end of the "Why and How of the Adding Machine" filmstrip. 90% accuracy is required.
2. There are quizzes for periodic student progress through the Student Manual covering the following areas. 90% accuracy is required. The quizzes are as follows:
   a) Quiz 1 – Machine Parts (Optional – May eliminate – Media Test Duplication)
   b) Quiz 2 – Finger Placement, Posture and Addition
   c) Quiz 3 – Finger Placement and Subtraction
   d) Quiz 4 – Subtotal and Non-Add Keys
   e) Quiz 5 – Multiplication
   f) Quiz 6 – Decimals
3. Post-Test: A post test has been developed to get an overall evaluation of a student's competency – 90% accuracy is required. An alternate post test is also provided – 90% accuracy is required.

TESTS, continued:

4. Speed Drills: If you want to add speed drills to this unit, feel free to do so. After every quiz (2 - 6) you could have a required speed drill. Example: They have to complete Quiz 2 in 5 minutes on a separate drill after they have passed Quiz 2. Use a timer and time them as if it were a typing test. Make sure you add the speed drill indicator on your Progress to Success sheet so that you make sure they do it.

   For the rest of the quizzes (3 - 6) you can try them yourself and set the time standard. If they do not pass the standard set by you, they should practice until they can pass it.

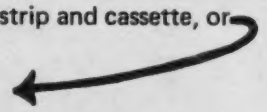
VIII. SUPPLIES

A. Adding Machine and Manual for reference.

B. Slide Tape/Filmstrip and Cassette titled "Why and How of the Adding Machine". (Optional). To be shown before student starts unit – also includes a test on the media.

C. Auto-Sinc Filmstrip Projector – if you have a filmstrip and cassette, or

D. Slide-Sinc Projector – if you have slides and tape.



E. Pencil

F. Stapler to staple tapes to proper pages.

ADDING MACHINE ANSWER KEYS

PRE-TEST ANSWER KEY

1. 204.59
2. 253.85
3. 1,531.93
4. 786.72
5. 47.68
6. 602.94
7. 424.90
8. 3.19
9. 129.77
10. 1.0058
11. 54741
12. 135177
13. 78375
14. 716450
15. 3.33972
16. 688.52
17. 694.46
18. 11.13
19. 136.45
20. 137.21
21. 363.72
22. 1339
23. 1686
24. 179.17
25. 1903
26. 3.01 (–) tc
27. 13.07
28. 75.56
29. .55
30. 7646872
31. 228933
32. 688.52

QUIZ 1 ANSWER KEY

1. Tape (paper)
2. Paper Cutter
3. Column Indicator
4. Subtotal Key
5. Non-Add Key
6. Minus Key
7. Repeat Key
8. Plus Bar
9. Total Key
10. Platen Knob

QUIZ 2 ANSWER KEY

1. 44.40
2. 44.00
3. 37.95
4. 46.14
5. 34.37
6. 1,741.65
7. 5,689.83
8. 8,000.80
9. Teacher Evaluation
10. Teacher Evaluation

ADDING MACHINE ANSWER KEY

QUIZ 3 ANSWER KEY

1. 3670
2. 275.25 (–) TC
3. 1216.88
4. 500.57 (–) TC
5. 322.40 (–) TC
6. 6.66
7. 1214.78
8. 174.01
9. 29.25 (–) TC
10. Teacher Evaluation

QUIZ 4 ANSWER KEY

1. 7.77
2. 17.31
3. 19.95
4. 1335
5. 77676
6. 78619
7. 1022
8. 5534
9. 3288
10. Teacher Evaluation

QUIZ 5 ANSWER KEY

1. 2534
2. 8448
3. 6792
4. 3696
5. 36,890
6. 1710
7. 6732
8. 3450
9. 16,632
10. 74,134

QUIZ 6 ANSWER KEY

1. 17.741
2. 225.966
3. 39.412
4. 4776.77
5. 668.1359
6. 23.75
7. 173.0976
8. 6154
9. 7293
10. 16632

ADDING MACHINE ANSWER KEY

POST-TEST I ANSWER KEY

1. 204.59
2. 253.85
3. 1,531.93
4. 786.72
5. 47.68
6. 602.94
7. 424.90
8. 3.19
9. 129.77
10. 1.0058
11. 54741
12. 135177
13. 78375
14. 716450
15. 3.33972
16. 688.52
17. 694.46
18. 11.13
19. 136.45
20. 137.21
21. 363.72
22. 1339
23. 1686
24. 179.17
25. 1903
26. 3.01 (–) TC
27. 13.07
28. 75.56
29. .55
30. 7646872
31. 228933
32. 688.52
33. PASSED/FAILED
Teacher Evaluation

POST-TEST II ANSWER KEY

1. 765.56
2. 422.81
3. 1473.29
4. 874.65
5. 185.51 (–) TC
6. 592.50
7. 721.45
8. 2.47
9. 135.71
10. .833
11. 69564
12. 319506
13. 278625
14. 1993955
15. 3.46608
16. 197.26
17. 214.27
18. 15.21
19. 125.95
20. 126.62
21. 140.30
22. 1926
23. 3041
24. 93.76
25. 1990
26. .58 (–) TC
27. 6.75
28. 54.31
29. 1.72
30. 20232742
31. 85968
32. 734.29
33. PASSED/FAILED
Teacher Evaluation

ADDING MACHINE ANSWER KEY

MEDIA TEST ANSWER KEY

1. c
2. c
3. c
4. b
5. d
6. a
7. c
8. b
9. c
10. c
11. a
12. c
13. b
14. c
15. a

PROGRESS CHART

DIRECTIONS: After you have successfully completed each activity and have received your teacher's signature, you are to return to your Student Manual and complete the next page.

Teacher Signature

LETTER TO STUDENT – Read Carefully ..... _____

ACTIVITY 1 – Machine Parts

QUIZ 1 – Machine Parts ..... _____

ACTIVITY 2 – Practice Adding & Total Key ..... _____
(Check tape for circles)

ACTIVITY 3 – Practice on Upreaches to 7, 8, 9

ACTIVITY 4 – Practice on 1, 2, & 3 Keys

ACTIVITY 5 – Practice on Zero Key

ACTIVITY 6 – Business World Problems – Addition ..... _____

DEMONSTRATE CORRECT FINGER PLACEMENT TECHNIQUE ..... _____

QUIZ 2 – Finger Placement, Posture & Addition ..... _____

ACTIVITY 7 – Practice on Subtraction

ACTIVITY 8 – Business World Problem – Subtraction

QUIZ 3 – Finger Placement & Subtraction ..... _____

ACTIVITY 9 – Practice on Subtotal & Non-Add

ACTIVITY 10 – Business World Problem – Subtotal & Non-Add

QUIZ 4 – Subtotal & Non-Add Keys ..... _____

ACTIVITY 11 – Practice on Multiplication

ACTIVITY 12 – Business World Problems – Multiplication

QUIZ 5 – Multiplication ..... _____

ACTIVITY 13 – Practice on Adding & Subtracting with Decimals

ACTIVITY 14 – Practice on Multiplying with Decimals

ACTIVITY 15 – Business World Problems – Decimals

QUIZ 6 – Decimals ..... _____

POST TEST ..... _____

PAGE 3 OF LAP – STEP 2

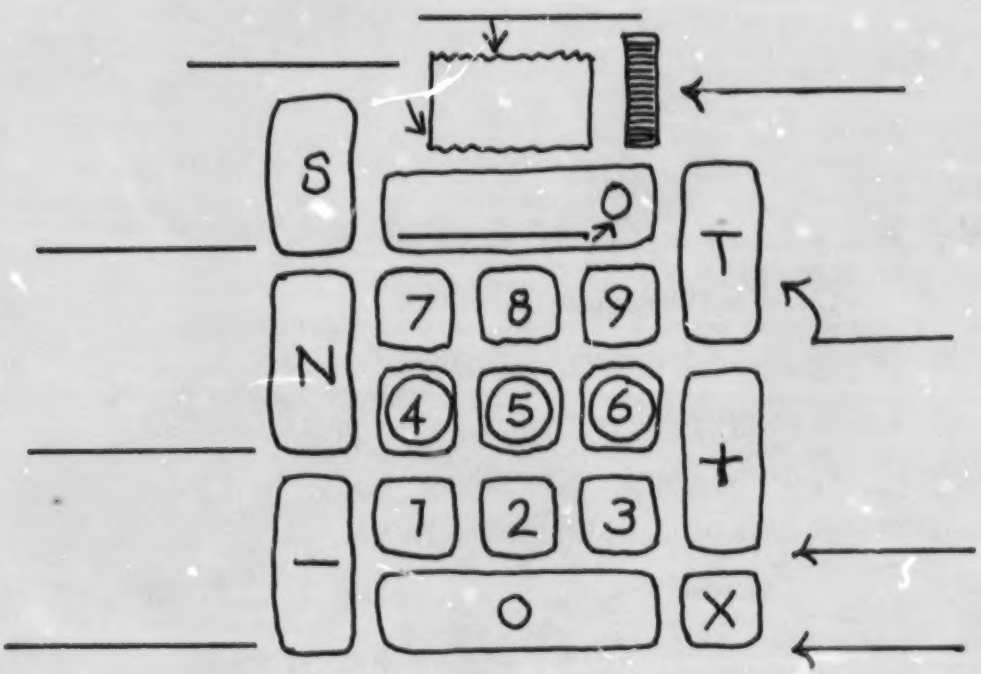
_____ _____ _____

_____ _____ _____

_____ _____ _____

_____

ACTIVITY 1



ACTIVITY 6

1. Total: _____
2. Total: _____
3. Correct / Wrong _____ (Circle One)
4. Correct / Wrong _____ (Circle One)

ACTIVITY 8

	Last Month	This Month	DIFFERENCE Increase	DIFFERENCE Decrease
Boys' Clothes	158.60	210.40		
Cosmetics	610.50	520.00		
Hardware	462.70	370.82		
Junior Clothes	206.70	179.80		
Pet	523.00	435.00		
Shoes	894.63	1,062.17		
Snack Bar	93.67	104.62		
Sporting Goods	1,293.44	2,078.56		
Toys	783.40	809.40		
			1,041.41	297.28

ACTIVITY 10

(PUT THE BALANCE IN YOUR MACHINE FIRST!)

CHECK NO.	DATE	CHECK ISSUED TO	DEPOSITS (Add)		AMOUNT OF CHECK (Subtract)		BALANCE $162.14	
123	10/16	Pacific, Gas, and Elec.			12	03	150	11
124	10/17	Treeland Rental Agency			100	00	50	11
	10/18		350	00				
125	10/19	Beast Bay MUD			26	78		
126	10/22	Catwells			40	00		
127	10/23	Sears Sawbuck Co.			25	67		
128	10/24	TankAmericard	250	00				
129	10/25	Good Care Auto			57	88		
130	10/27	Monkey Wards			37	82		
131	10/30	Noosepaper			2	25	459	71
							TOTAL	

ACTIVITY 12

Complete Problems 1 and 2 below using the example on Page 27 of your Student Manual. Remember to do *each* problem *twice*!

1.)

STOCK NO.	DESCRIPTION	PRICE	QUANTITY	VALUE
42-371P	Leisure Suit	69.95	13	
43-472T	Tank Tops	3.98	176	
760998S	Shorts	6.89	83	
56-332J	Levis	13.98	245	
29-667B	Blouses	7.62	9	
66-201S	Sandles	10.50	23	
12-009T	Ties	5.00	4	
01-789E	Earrings	3.49	76	
				6202.12
				TOTAL

2.)

STOCK NO.	DESCRIPTION	PRICE	QUANTITY	VALUE
39-R	Tennis Racket	42.95	108	
47-C	Racket Cover	5.59	37	
88-B	Baseball Bat	9.99	82	
56-B	Baseball	3.48	34	
70-B	Bowling Balls	21.99	56	
87-S	Bowling Shoes	15.75	9	
33-R	Roller Skates	23.98	52	
69-I	Ice Skates	31.31	29	
				9311.07
				TOTAL

ACTIVITY 15 – Business World Decimal Problems

In the problems below figure the total amount owed you by the two companies below. Use Page 34 in your Student Manual to guide you. Your answer should equal the one given – if it doesn't . . . Repeat until it does.

AM Enterprises, Inc.
111 Fifth Street, Clovis, California 93612

VOID

PURCHASE ORDER NO. PO 593-7 DATE 3-12-79
DELIVER TO SAME
DELIVERY DATE 3-24-79
SHIP BY Air Freight

TO FRANK SMITH
125 E. LARSON
WESTSIDE, CALIF. 91221

QUANTITY	STOCK NO.	DESCRIPTION	UNIT PRICE	TOTAL PRICE
12	ST-942-0	PUSH BROOMS	1.95	
3	ST-111-2	METAL BUCKETS	1.25	
1	ST-433-3	ALUMINUM LADDER	24.95	
4	ST-998-0	STEP LADDER	10.19	
			TOTAL	$92.86

PURCHASING AGENT

PURCHASE ORDER 18

AM Enterprises, Inc.
111 Fifth Street, Clovis, California 93612

VOID

PURCHASE ORDER NO. PO 593-8 DATE 3-4
DELIVER TO SAME
DELIVERY DATE 3-14
SHIP BY U.P.S.

TO JOHN JONES
892 PARK PLACE
WESTSIDE, CALIF. 92341

QUANTITY	STOCK NO.	DESCRIPTION	UNIT PRICE	TOTAL PRICE
3	ST-997-2	WHITE LATEX PAINT	10.95	
4	ST-886-2	LONG HANDLE ROLLER	3.79	
2	ST-886-0	PAINT PANS	1.15	
3	ST-994-1	YELLOW PAINT	6.58	
			TOTAL	$70.05

PURCHASING A

Review decimals and obtain Quiz 6 from your instructor.

ADDING MACHINE
WORKING PAPERS PAGE 6

STAPLE TAPES HERE

ACTIVITY 2

ACTIVITY 3

ACTIVITY 4

ACTIVITY 5

ACTIVITY 6

ACTIVITY 7

ACTIVITY 8

STAPLE TAPES HERE

ACTIVITY 9

ACTIVITY 10

ACTIVITY 11

ACTIVITY 12

ACTIVITY 13

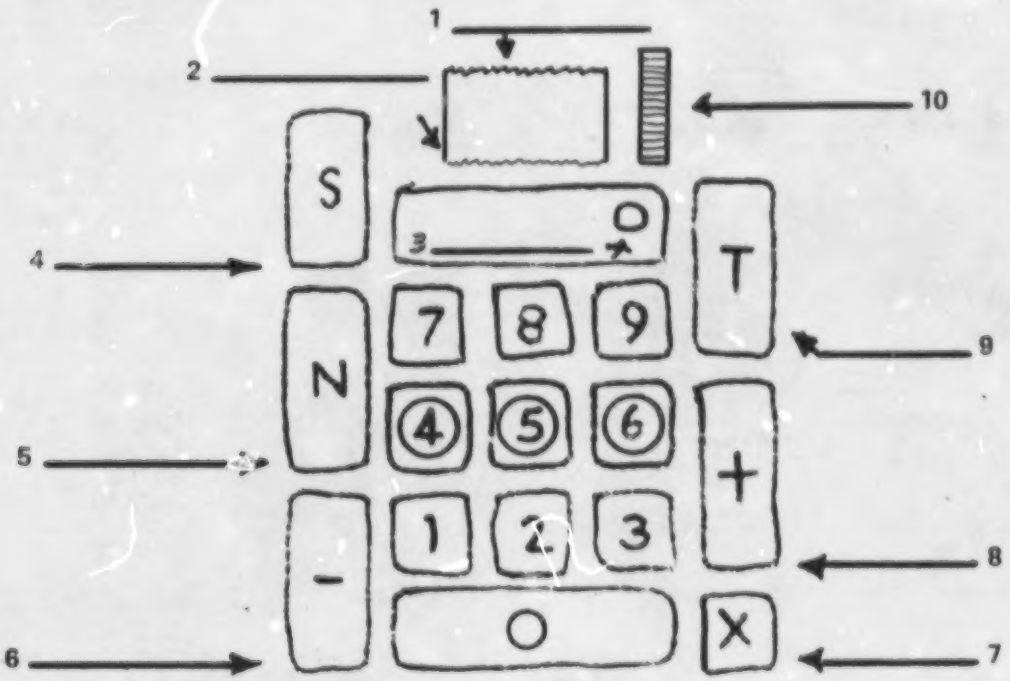
ACTIVITY 14

ACTIVITY 15

ADDING MACHINE

QUIZ 1 – MACHINE PARTS

DIRECTIONS: Label the parts as indicated below. *DO NOT* write on this test! Write your answers beside the corresponding numbers on your Adding Machine Answer Sheet.



ADDING MACHINE

QUIZ 2 – FINGER PLACEMENT, POSTURE AND ADDITION

DIRECTIONS: Do each of the problems twice to verify accuracy. Place both answers (they should be the same) on the answer sheet provided. *DO NOT* write on this test!

(1)	(2)	(3)	(4)
5.55	5.50	4.44	6.39
5.55	2.20	4.11	6.36
6.66	8.80	4.77	3.36
6.66	8.20	7.74	6.33
4.44	2.80	1.14	6.99
4.44	2.50	4.17	3.99
5.55	8.60	7.14	9.33
5.55	5.50	4.44	3.39

(5)	(6)	(7)	(8)
1.03	78.98	521.20	687.50
3.01	77.97	532.15	829.60
4.06	9.87	531.23	522.70
6.04	755.98	123.21	189.80
7.09	7.09	344.30	950.50
9.07	700.00	.10	3,849.21
3.01	56.78	3,625.14	427.80
1.06	54.98	12.50	543.69

(9) Proper use of touch system without Looking
(Teacher evaluation on Answer Sheet for Quiz 2)

(10) Proper posture (Teacher evaluation on Answer Sheet for Quiz 2)

ADDING MACHINE

QUIZ 3 – FINGER PLACEMENT AND SUBTRACTION

DIRECTIONS: Do each of the problems twice to verify accuracy. Place both answers (they should be the same) on the answer sheet provided. *DO NOT* write on this test!

(1)
9510
6840–

(2)
312.20
587.45–

(3
1960.74
–734.86

(4)
5.17
811.04
583.70–
482.52
308.80
738.52–
56.26
114.20
8.70

(5)
186.04–
546.95
597.92–
4.65
73.55
94.59
38.53
76.57
373.28–

(6)
8.10
2.30
5.84–
7.61–
9.71
4.96
6.77
2.61–
9.12–

(7)
2619.80
1405.02–

(8)
652.75–
278.09–
615.25
9.47–
63.27
876.74–
715.43
59.04
538.07

(9)
68.38
–97.63

(10) Proper use of touch system without Looking
(Teacher evaluation on answer sheet for Quiz 3)

ADDING MACHINE

QUIZ 4 – SUBTOTAL AND NON-ADD KEYS

DIRECTIONS: In order for you to demonstrate that you know how to use the Non-Add Key, number each problem using the non-add key on your tape before starting *each* problem.

Do each problem twice to verify accuracy. Put your answers on the answer sheet provided. *DO NOT* write on this test!

✓ NOTE: *The answers given for Grand Total may be wrong . . .* So, watch it!

(1)
2.01
5.76

____ ST (1)

4.31
5.23

____ ST (2)

2.10
.54

____ ST (3)

2.43
22.38 Total

(2)
156
1179
76341 ST (4)
943 ST (5)
442 ST (6)
79066 GT

(3)
179
486
357

____ ST (7)

51
4461

____ ST (8)

498

6032 Total

(4)
165
2778
346
428 ST (9)
3716 GT

(10) Teacher evaluation on answer sheet – proper use of the Non-Add Key.

ADDING MACHINE

QUIZ 5 – MULTIPLICATION

DIRECTIONS: Do each of the problems twice to verify accuracy. Place both answers (they should be the same) on the answer sheet provided. *DO NOT* write on this test!

(1) 362
x 7

(2) 192
x44

(3) 566
x 12

(4) 28
x132

(5) 595
x62

(6) 38
x 45

(7) 187
x 36

(8) 150
x 23

(9) 126
x132

(10) 367
x202

ADDING MACHINE
QUIZ 6 – DECIMALS

DIRECTIONS: Do each of the problems twice to verify accuracy. Place both answers (they should be the same) on the answer sheet provided. *DO NOT* write on this test!

(1) 16.531
+ 1.21

(2) 14.566
+ 211.4

(3) 15.1
+24.312

(4) 5029
−252.23

(5) 723.07
−549341

(6) 68.38
− 44.63

(7) 416.1
x .416

(8) 362
x 17

(9) 187
x 39

(10) 126
x 132

ADDING MACHINE
PRE-TEST

DIRECTIONS: Do the following 32 problems which measures your ability on the adding machine to: subtract, multiply, obtain a subtotal, grand total, and proper use of decimals in problems. The touch system *should be used* throughout the entire test. *DO NOT* write on this test . . . Use the answer sheet provided.

✓ Hint: Do each problem twice to check your accuracy.

Good Luck!

(1)
5.36
.15
7.18
22.37
2.99
.66
.25
1.64
163.99
T

(2)
.50
.32
8.80
.11
12.10
125.10
36.21
5.20
3.63
61.88
T

(3)
726.17
5.34
7.85
.08
4.48
91.79
652.37
.67
43.18
T

(4)
7.28
2.08
24.94
9.11
.55
382.56
.93
5.54
.03
353.70
T

(5)
6.42
.02
.66
578.78–
25.15
1.56
32.50–
600.00
25.15
T

(6)
2.64
164.47
.21
12.11–
.71
4.83–
785.16
333.31–
T

(7)
467.79
42.89–
T

(8)
7.94
4.75–
T

(9)
134.55
4.78–
T

(10)
1.07
x .94
T

(11)
257
x213
T

(12)
157
x861
T

(13)
1,375
x 57
T

(14) 1,246
x 575
T

(15) 27.821
x .12
T

4.11
.55
4.07
671.93
7.78
.08
ST (16)
1.69
1.69
2.41
.15
GT (17)

2.01
5.76
3.36
ST (18)
20.80
97.50
.89
6.13
ST (19)
.75
.01
GT (20)

(21) .06
.06
.06
.91
.91
88.38
88.38
88.38
88.38
4.10
4.10
T

(22) 257
257
41
41
44
44
44
120
120
120
120
131
T

(23) 537
15
718
227
25
164
T

---

(24) 94.24
2.80
.97
8.71
72.45
T

(25) 620
71
79
362
72
699
T

(26) .10
5.47–
9.12
7.50–
.74
T

(27) 6.13
6.63
.31
36.39–
36.39
T

(28) 85.50
9.94
T

---

(29) 9.25
- 8.7
T

(30) 7,624
x1,003
T

(31) 3,753
61
T

(32) 4.11
.55
4.07
671.93
7.78
.08
T

ADDING MACHINE
POST TEST
I

DIRECTIONS: Do the following 32 problems which measures your ability on the adding machine to: subtract, multiply, obtain a subtotal, grand total, and proper use of decimals in problems. The touch system *should be used* throughout the entire test.

DO NOT write on this test . . . use the answer sheet provided.

Hint: Do each problem twice to check your accuracy. Good Luck!

(In some of the problems, you may get a negative answer)

(1)
5.36
.15
7.18
22.37
2.99
.66
.25
1.64
163.99
T

(2)
.50
.32
8.80
.11
12.10
125.10
36.21
5.20
3.63
61.88
T

(3)
726.17
5.34
7.85
.08
4.48
91.79
652.37
.67
43.18
T

(4)
7.28
2.08
24.94
9.11
.55
382.56
.93
5.54
.03
353.70
T

(5)
6.42
.02
.66
578.78–
25.15
1.56
32.50–
600.00
25.15
T

(6)
2.64
164.47
.21
12.11–
.71
4.83–
785.16
333.31–
T

(7)
467.79
42.89–
T

(8)
7.94
4.75–
T

(9)
134.55
4.78–
T

(10)
1.07
x .94
T

(11)
257
x213
T

(12)
157
x861
T

(13)
1,375
x 57
T

(14)
1,246
x 575
T

(15) 27.831
x .12
T

4.11
.55
4.07
671.93
7.78
.08
ST (16)
1.69
1.69
2.41
.15
GT (17)

2.01
5.76
3.36
ST (18)
20.80
97.50
.89
6.13
ST (19)
.75
.01
GT (20)

(21) .06
.06
.06
.91
.91
88.38
88.38
88.38
88.38
4.10
4.10
T

(22) 257
257
41
41
44
44
44
120
120
120
131
T

(23) 537
15
718
227
25
164
T

(24) 94.24
2.80
.97
8.71
72.45
T

(25) 620
71
79
362
72
699
T

(26) .10
5.47–
9.12
7.50–
.74
T

(27) 6.13
6.63
.31
36.39–
36.39
T

(28) 85.50
– 9.94
T

(29) 9.25
– 8.7
T

(30) 7,624
x1,003
T

(31) 3,753
x 61
T

(32) 4.11
.55
4.07
671.93
7.78
.08
T

(33) Teacher Evaluation of Touch-System on Answer Sheet.

ADDING MACHINE
POST-TEST
II

DIRECTIONS: Do the following 32 problems which measures your ability on the adding machine to: subtract, multiply, obtain a subtotal, grand total, and proper use of decimals in problems. The touch system *should be used* throughout the entire test.

DO NOT write on this test . . . use the answer sheet provided.

Hint: Do each problem twice to check your accuracy. Good Luck!

(In some of the problems, you may get a negative answer)

(1)
3.65
.51
8.17
37.22
9.29
.66
.52
6.41
699.13
T

(2)
.05
.23
8.08
.11
10.12
251.01
63.12
2.05
6.36
81.68
T

(3)
767.12
3.54
8.75
.80
8.48
19.97
625.73
.76
38.14
T

(4)
2.78
8.02
42.49
1.19
.55
283.65
.39
4.55
.30
530.73
T

(5)
4.62
.20
.66
875.87–
52.51
5.16
25.30–
600.00
52.51
T

(6)
6.24
146.74
.12
11.21–
.17
3.84–
587.61
133.33–
T

(7)
769.74
48.29–
T

(8)
7.94
5.47–
T

(9)
143.55
7.84–
T

(10)
1.70
x .49
T

(11)
132
x527
T

(12)
618
x517
T

(13)
3,715
x 75
T

(14) 2,641
x 755

(15) 12.381
x .28

1.41
.55
7.04
179.36
8.87
.03
ST (16)
6.19
6.19
4.12
.51
GT (17)

1.02
7.56
6.63
ST (18)
28.00
79.05
.08
3.61
ST (19)
.57
.10
GT (20)

(21) .60
.60
.60
.19
.19
33.83
33.83
33.83
33.83
1.40
1.40
T

(22) 257
257
14
14
77
77
77
210
210
210
210
313
T

(23) 753
51
817
727
52
641
T

(24) 49.42
8.20
.79
7.81
27.54
T

(25) 260
17
97
623
27
966
T

(26) .01
4.57–
9.21
5.70–
.47
T

(27) 3.16
3.46
.13
63.93–
63.93
T

(28) 58.80
– 4.49
T

(29) 9.52
– 7.8
T

(30) 6,742
x3,001
T

(31) 5,373
x 16
T

(32) 1.41
.55
7.04
716.39
8.87
.03
T

(33) Teacher Evaluation of Touch System on Answer Sheet.

WHY & HOW OF THE ADDING MACHINE
MEDIA TEST

DIRECTIONS: Place your answers to the problems below on the answer sheet provided. DO NOT write on this test!!

POSTURE

1. Proper posture means:
   a) Getting a comfortable position
   b) Putting machine to your left and book to your right; sitting erect with feet flat on the floor.
   c) Putting machine to your right, book to your left, and sitting erect with feet flat on the floor.
   d) None of the above

PARTS

2. To enter the number 3 into your machine you should press the:
   a) 3 key and then the subtotal key
   b) 3 key and then the non-add key
   c) 3 key and then hit the plus bar
   d) None of the above

3. The _____ is used to *add* the number you have set in your keyboard.

   a) Subtotal
   b) Minus key
   c) Plus bar
   d) None of the above

4. The key you strike to obtain a grand total is the:
   a) Subtotal Key
   b) Total Key
   c) Non-Add Key
   d) None of the above

5. The _____ is the key you press that gives you a temporary total:
   a) Non-Add Key
   b) Total Key
   c) Repeat Key
   d) None of the above

6. The number of digits that you have entered in your machine is indicated by the:
   a) Keyboard column indicator
   b) Subtotal Indicator
   c) Non-Add Indicator
   d) None of the above

7. The key you strike to clear the numbers you have set in your keyboard but not entered is the:
   a) Non-Add Key
   b) Total Key
   c) Clear Key or lever
   d) None of the above

8. The repeat key is used mainly to:
   a) Add
   b) Multiply
   c) Subtract
   d) None of the above

9. The key that prints a number on the tape without adding it to the other numbers is called:
   a) Total Key
   b) Clear Key
   c) Non-Add Key
   d) None of the above

TOUCH OPERATION

10. The four, five and six keys are called your:
   a) Non-Add Keys
   b) Subtotal Keys
   c) Home-Row Keys
   d) None of the above

11. Your _____ finger always operates the one, four and seven keys:
   a) Index
   b) Middle
   c) Ring
   d) None of the above

12. Your _____ finger always operates your three, six and nine keys:
   a) Index
   b) Middle
   c) Ring
   d) None of the above

13. Your _____ finger operates the two, five and eight keys:
   a) Thumb
   b) Middle
   c) Ring
   d) None of the above

14. Your _____ (finger) operates the zero key.
    a) Little
    b) Middle
    c) Thumb
    d) None of the above

15. We learn to use the adding machine because it: saves time; is more accurate; is used in businesses; is easy to transfer to a calculator because of basic knowledge:
    a) True
    b) False.

ADDING MACHINE

ANSWER SHEETS FOR PRE-TEST, QUIZZES, AND POST-TEST

DIRECTIONS: You should use this Answer Sheet Package every time you take a Pre-test, Quiz or Post-Test. Make sure you put your answers on the correct section. After you finish *each* test or quiz attach your tape to the appropriate spot on the last page of this Package. Upon completion of each quiz or test show your instructor for credit.

.....

PRE-TEST ANSWER SHEET

1. _____	12. _____	23. _____
2. _____	13. _____	24. _____
3. _____	14. _____	25. _____
4. _____	15. _____	26. _____
5. _____	16. _____	27. _____
6. _____	17. _____	28. _____
7. _____	18. _____	29. _____
8. _____	19. _____	30. _____
9. _____	20. _____	31. _____
10. _____	21. _____	32. _____
11. _____	22. _____	_____

.....

WHY & HOW OF THE ADDING MACHINE

MEDIA ANSWER SHEET

(Optional — Use only if student has seen Media Presentation)

1. _____	6. _____	11. _____
2. _____	7. _____	12. _____
3. _____	8. _____	13. _____
4. _____	9. _____	14. _____
5. _____	10. _____	15. _____

QUIZ 1 – PARTS

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

QUIZ 2 – FINGER PLACEMENT, POSTURE AND ADDITION

(Remember, NO LOOKING at your machine)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

9. Proper Posture (Teacher Evaluation): Passed/Failed _____ (Initial)

10. Touch System (Teacher Evaluation): Passed/Failed _____ (Initial)

** Put your name and the quiz number on the top of your tape and attach the tape to the last page of the Answer Sheet.

QUIZ 3 – FINGER PLACEMENT AND SUBTRACTION

(Remember, NO LOOKING at your machine)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____

10. Touch System (Teacher Evaulation): Passed/Failed _____ (Initial)

** Put your name and the quiz number on the top of your tape and attach the tape to the last page of the Answer Sheet.

QUIZ 4 – SUBTOTAL AND NON-ADD KEYS

_____ ST (1)	_____ ST (4)	_____ ST (7)
_____ ST (2)	_____ ST (5)	_____ ST (8)
_____ ST (3)	_____ ST (6)	_____ ST (9)

(10) Use of Non-Add Key for Numbering Problems (Teacher Evaluation):

Passed/Failed _____
(Initial)

** Put your name and the quiz number on the top of your tape and attach the tape to the last page of the Answer Sheet.

. . . . . .

QUIZ 5 – MULTIPLICATION

1. _____	4. _____	7. _____
_____	_____	_____
2. _____	5. _____	8. _____
_____	_____	_____
3. _____	6. _____	9. _____
_____	_____	_____
		10. _____
		_____

** Put your name and the quiz number on the top of your tape and attach the tape to the last page of the Answer Sheet.

. . . . . .

QUIZ 6 – DECIMALS

1. _____	4. _____	7. _____
_____	_____	_____
2. _____	5. _____	8. _____
_____	_____	_____
3. _____	6. _____	9. _____
_____	_____	_____
		10. _____
		_____

** Put your name and the quiz number on the top of your tape and attach the tape to the last page of the Answer Sheet.

POST-TEST I

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____
23. _____
24. _____
25. _____
26. _____
27. _____
28. _____
29. _____
30. _____
31. _____
32. _____
33. Passed/Failed _____

ALTERNATE POST-TEST II

(If needed)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____
23. _____
24. _____
25. _____
26. _____
27. _____
28. _____
29. _____
30. _____
31. _____
32. _____
33. Passed/Failed _____

PRE-TEST
TAPE

QUIZ 2
TAPE

QUIZ 3
TAPE

QUIZ 4
TAPE

ALTERNATE
POST TEST
TAPE

QUIZ 5
TAPE

POST TEST
TAPE

QUIZ 6
TAPE